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# DEVELOPMENTS IN MARKETING SPREADS FOR AGRICULTURAL PRODUCTS IN

# 1968

Economic Research Service  
U.S. Department of Agriculture

Reprinted from Hearings Before the Subcommittee of the  
Committee on Appropriations, United States House of  
Representatives, Ninety-First Congress, First Session



## PREFACE

The Congress in 1955 directed the Department of Agriculture to make special studies of spreads between prices paid by consumers and those received by farmers. The reports published in 1968 and early 1969 are summarized in this report, which was prepared for the Subcommittee of the Committees on Appropriations of the House of Representatives and of the United States Senate. Eleven similar reports have been published summarizing the results of earlier studies.

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## DEVELOPMENTS IN MARKETING SPREADS FOR AGRICULTURAL PRODUCTS IN 1968

### HIGHLIGHTS

1. The retail cost of the market basket of farm foods averaged  $3\frac{1}{2}$  percent higher in 1968 than in 1967. Food costs rose through August and stabilized in the remainder of the year. The retail cost of the market basket averaged the same in the third and fourth quarters of 1968.
2. Farmers received about 5 percent more for food commodities in 1968 than in 1967. Higher farm values for meat products and fresh fruits and vegetables accounted for three-fourths of this increase.
3. The farmer's share of the dollar consumers spent for food averaged 39 cents in 1968--1 cent more than in 1967.
4. The spread between the retail cost and farm value of the market basket widened about  $2\frac{1}{2}$  percent in 1968, continuing a long-term upward trend. The increase in 1968 was double the annual average increase of the past decade. The farm-retail spread increased for all product groups in 1968, although the percentage increase for fresh fruits and vegetables was about 3 times greater than for other food groups.
5. Marketing costs continued to rise in 1968. Prices paid by food marketing firms for goods and services rose 3 to 4 percent in 1968, while hourly earnings of persons employed by food processors, wholesalers and retailers rose 6 percent.
6. Firms marketing farm products earned about the same profit in 1968 as in 1967. Profits after taxes of 15 leading retail food chains averaged 1 percent of sales in the first 9 months of 1968. This was the same as a year earlier, when it was the lowest since 1957. Profits of corporations manufacturing food products amounted to 2.4 percent of sales in the first 9 months of 1968, the same as a year earlier.
7. Per person expenditures for all food amounted to \$503 in 1968-- $5\frac{1}{2}$  percent above a year earlier. Although food expenditures rose, the percent of consumer disposable income spent for food declined slightly in 1968 to around 17.2 percent.
8. Labor productivity in food marketing rose substantially throughout the 1950's and early 1960's. Gains in labor productivity have been greater in food manufacturing than in food distribution, although productivity gains of both have been comparable to the total nonfarm sector of the economy.
9. Increased productivity partially offsets rising labor costs. From 1957-59 to 1967, food marketing labor costs per hour rose 47 percent while unit labor costs rose only about 18 percent.

## MARKET BASKET OF FARM FOODS

### Higher Retail Food Costs

Amid rising prices throughout the economy, the retail cost of food rose sharply through August of 1968 but was relatively stable the remainder of the year. The retail cost of a market basket of foods originating on U.S. farms averaged about 3½ percent higher in 1968 than in 1967. <sup>1/</sup> This increase was unusually large, but was smaller than the 5½ percent increase in 1966.

The retail cost of most food groups averaged higher in 1968 (table 1 and figure 1). Reduced supplies of fresh fruits and vegetables led to 11 percent higher average retail prices in 1968 than in 1967. Processed fruits and vegetable products averaged 6 percent higher. Fruits and vegetables accounted for about half of the increased cost of the entire market basket of farm foods.

The retail cost of meat products, which ranks first in retail cost among the products in the market basket, averaged 2 percent higher in 1968 than in 1967. Dairy products rose about 3½ percent and poultry and eggs rose 5½ percent. Prices of bakery and cereal products were relatively unchanged in 1968.

### Higher Farm Prices and Wider Farm-Retail Spreads

Farmers received higher prices for most food products in 1968 (table 1, figure 2). The farm value of all foods in the market basket averaged 4.9 percent higher in 1968 than in 1967. Farm value rose 17 percent in 1968 for all fruits and vegetables, 9 percent for poultry and eggs and about 4 percent for dairy and meat products. In contrast, farmers received less for commodities used in bakery and cereal products and fats and oils.

The spread between the retail cost and farm value (sometimes called the marketing margin) increased 2.6 percent in 1968. This was double the average annual increase during the past decade. The marketing spread for fruits and vegetables widened 5 percent in 1968, accounting for about half the total increase. Although spreads increased for all product groups, the spread for meat averaged about the same in 1968 as a year ago. Spreads for dairy products, poultry and eggs, and bakery and cereal products widened between 2 and 3 percent (figure 3).

### Farmer's Share of Food Dollar Up

The farmer's share of the consumer's dollar averaged 39 cents in 1968--1 cent higher than in 1967. This increase occurred because farm value rose more than the marketing spread. The farmer's share averaged higher for 3 of the 6 major food groups in 1968 (figure 4).

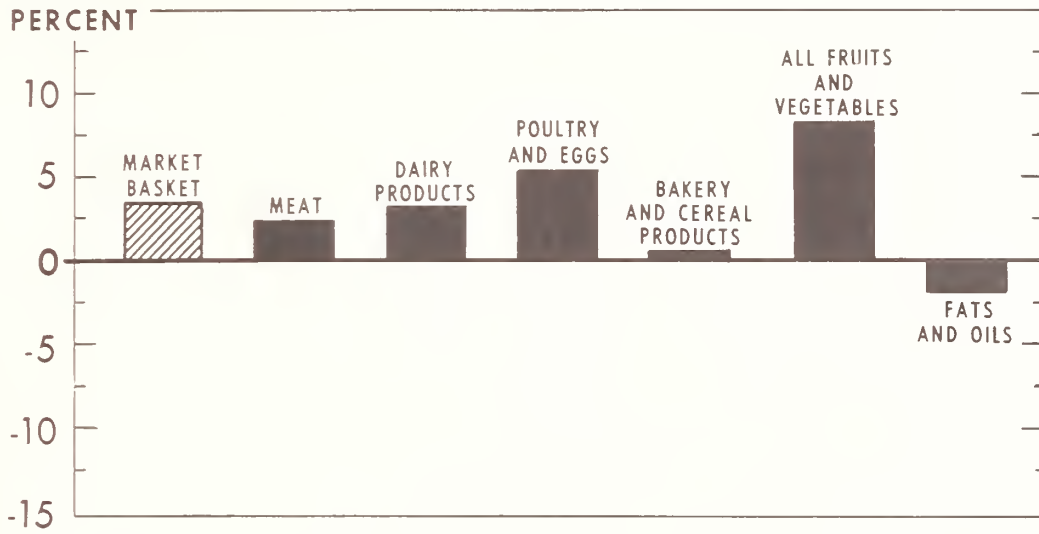
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<sup>1/</sup> The market basket includes the average quantities of farm-originated products purchased for consumption at home in 1960-61 by households of urban wage-earner and clerical-worker families and single persons living alone.



For Market Basket of Farm Foods

## CHANGE IN RETAIL COST 1967 TO 1968



BASED ON ANNUAL PURCHASES PER HOUSEHOLD BY URBAN WAGE EARNERS AND CLERICAL WORKERS IN 1960-61.

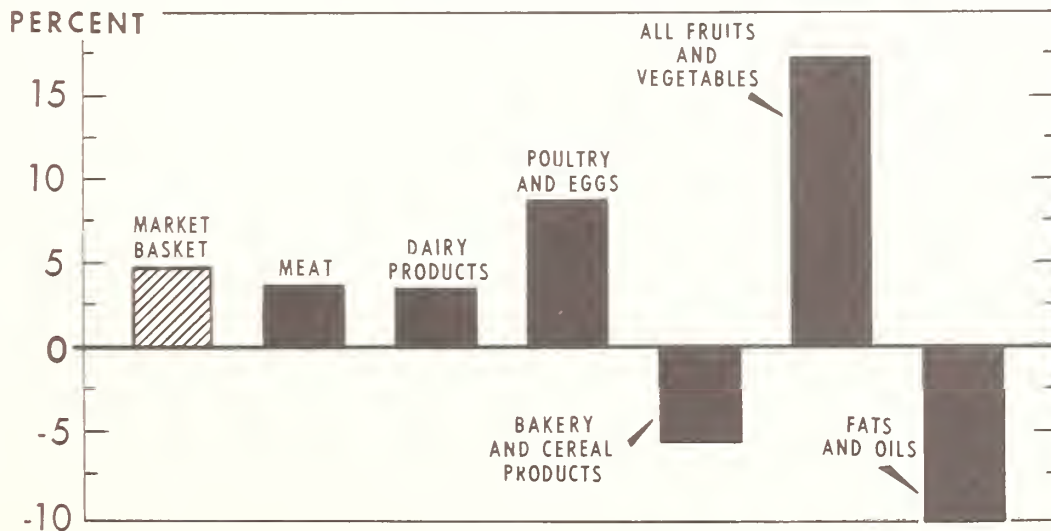
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Figure 1

For Market Basket of Farm Foods

## CHANGE IN FARM VALUE 1967 TO 1968



BASED ON ANNUAL PURCHASES PER HOUSEHOLD BY URBAN WAGE EARNERS AND CLERICAL WORKERS IN 1960-61.

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Figure 2

Table 1.--The market basket of farm foods: Retail cost, farm value, and farm-retail spread, annual 1968 and 1967

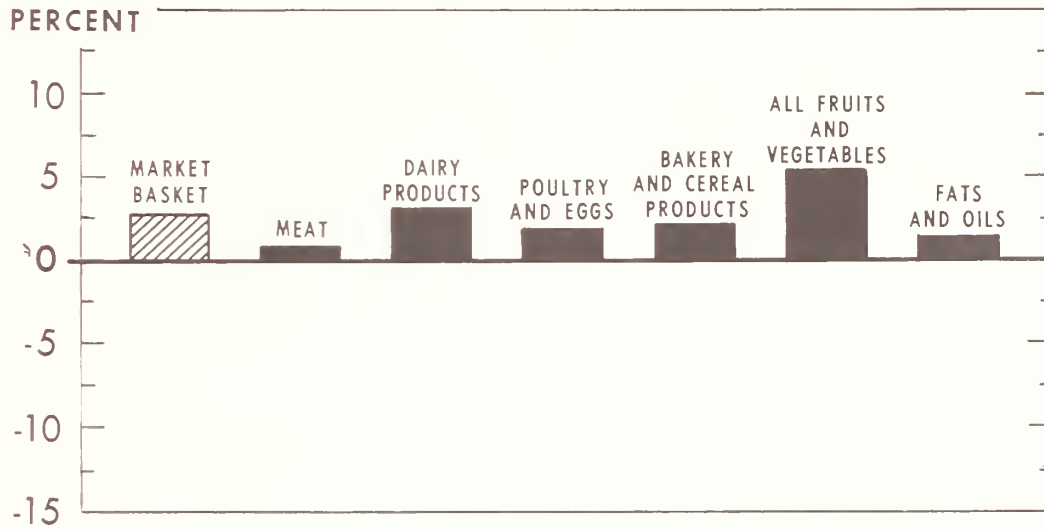
Item	1968	1967	Change: 1968 from 1967	
	<u>Dol.</u>	<u>Dol.</u>	<u>Dol.</u>	<u>Pct.</u>
	Retail cost 1/			
Market basket.....	1,117.71	1,079.88	37.38	3.5
Meat products.....	324.22	317.08	7.14	2.3
Dairy products.....	201.96	195.65	6.31	3.2
Poultry and eggs.....	85.97	81.55	4.42	5.4
Bakery and cereal products....	169.87	169.09	.78	.5
All fruits and vegetables.....	248.46	229.44	19.02	8.3
Fats and oils.....	38.04	38.79	-.75	-1.9
Miscellaneous products.....	49.19	48.28	.91	1.9
	Farm value 2/			
Market basket.....	434.36	414.06	20.30	4.9
Meat products.....	171.76	165.59	6.17	3.7
Dairy products.....	96.54	93.26	3.28	3.5
Poultry and eggs.....	46.96	43.21	3.75	8.7
Bakery and cereal products....	33.04	34.99	-1.95	-5.6
All fruits and vegetables.....	66.76	56.92	9.84	17.3
Fats and oils.....	9.87	11.00	-1.13	-10.3
Miscellaneous products.....	9.43	9.09	.34	3.7
	Farm-retail spread			
Market basket.....	683.35	665.82	17.53	2.6
Meat products.....	152.46	151.49	.97	.6
Dairy products.....	105.42	102.39	3.03	3.0
Poultry and eggs.....	39.01	38.34	.67	1.7
Bakery and cereal products....	136.83	134.10	2.73	2.0
All fruits and vegetables.....	181.70	172.52	9.18	5.3
Fats and oils.....	28.17	27.79	.38	1.4
Miscellaneous products.....	39.76	39.19	.57	1.5

1/ Retail cost of average quantities purchased annually per household in 1960-61 by urban wage-earner and clerical-worker families and single workers living alone, calculated from 1967 and 1968 retail prices collected by Bureau of Labor Statistics.

2/ Payments to farmers for equivalent of farm products minus imputed value of byproducts obtained in processing.

For Market Basket of Farm Foods

## CHANGE IN FARM-RETAIL SPREADS 1967 TO 1968



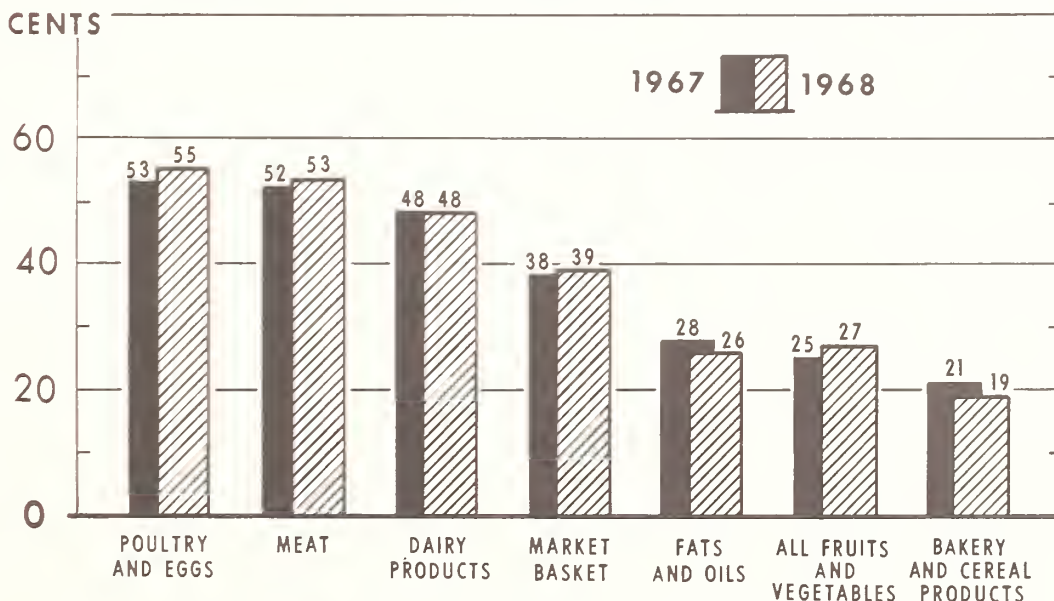
BASED ON ANNUAL PURCHASES PER HOUSEHOLD BY URBAN WAGE EARNERS AND CLERICAL WORKERS IN 1960-61.

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Figure 3

## FARMER'S SHARE OF CONSUMER'S RETAIL FOOD DOLLAR, BY FOOD GROUP



DATA FOR MARKET BASKET OF FARM FOODS BASED ON ANNUAL AVERAGE 1960-61 PURCHASES PER HOUSEHOLD, 1968 PRELIMINARY.

U. S. DEPARTMENT OF AGRICULTURE

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Figure 4

In the past 10 years, the farmer's share of the consumer retail food dollar has ranged between 37 and 40 cents with no trend showing. The farmer's share averaged 1 to 2 cents higher during the 1965-68 period than during the previous 4 years, but was about the same as the 1957-60 period (figure 5).

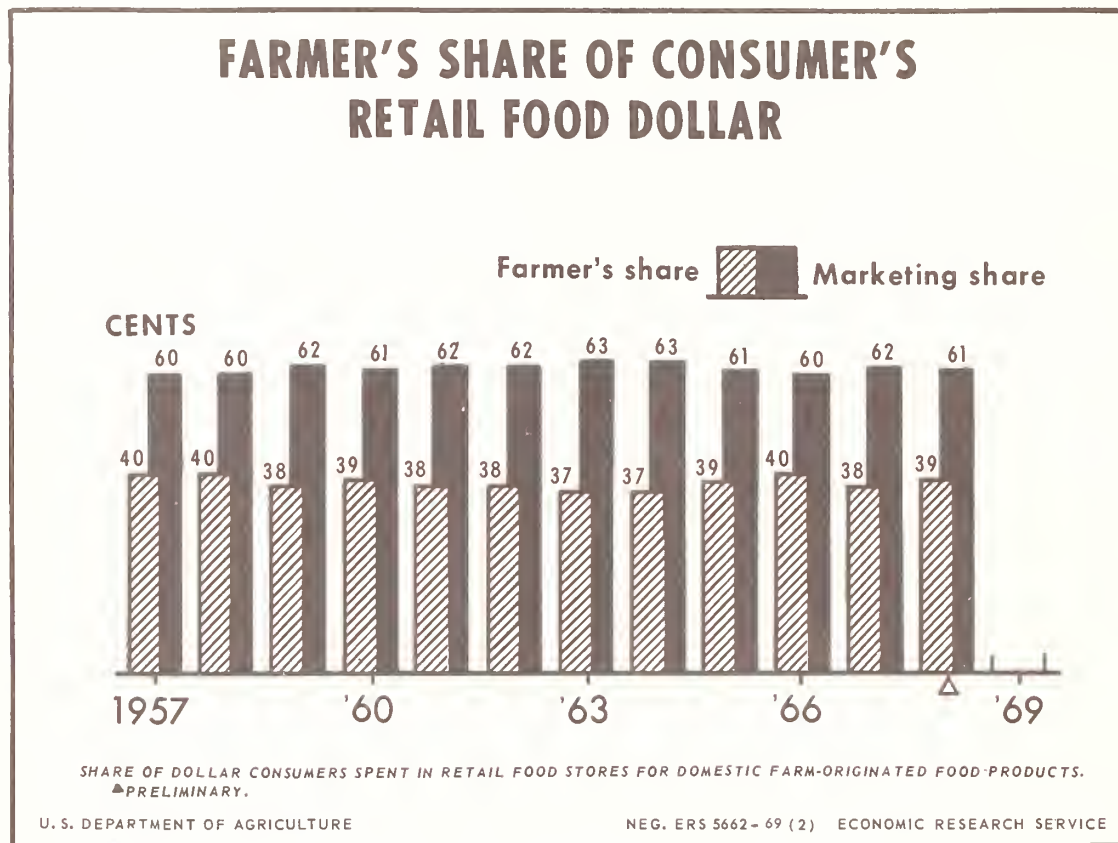


Figure 5

Although the farmer's share of the food dollar is about the same as 10 years ago, the farm value of foods in the market basket has increased. During the 1965-68 period, the farm value averaged \$425 per year, compared with \$378 during the 1957-60 period, an increase of 10 percent. In 1968, farm value amounted to \$434. Thus, farmers have been receiving more gross dollars for food commodities in recent years than a decade ago.

#### MARKETING COSTS CONTINUE TO RISE

Operating costs in marketing food continued to climb in 1968 (figure 6). Since the base period of 1957-59, rising marketing costs, as measured by the farm-retail spread, have accounted for around two-thirds of the increase in the retail cost of the market basket.

## PRICES OF INPUTS USED BY FOOD MARKETING FIRMS

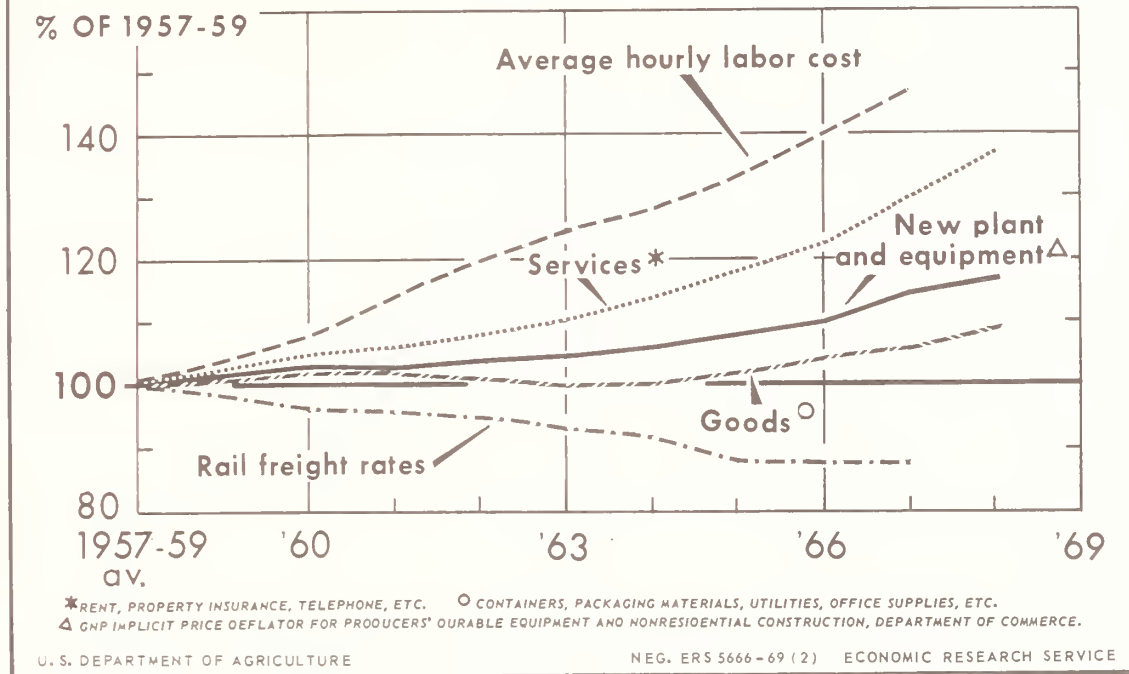


Figure 6

Hourly earnings of food marketing employees have been going up by a percentage each year for several years. In 1968, hourly earnings averaged \$2.67—6 percent more than in 1967. This compares with annual increases of around 5 percent in 1966 and 1967 and only 3 percent during 1963-65. Hourly earnings of food marketing employees have increased by around the same percentage as those of employees in other lines of manufacturing and trade.

Food marketing firms have partially offset rising labor costs by increasing output per man-hour. Hourly labor costs (wages, salaries, and fringe benefits of all employees) averaged 47 percent higher in 1967 than in 1957-59, but increases in output per man-hour kept the rise in labor cost per unit of product marketed to 18 percent (figure 7). About three-fourths of this increase occurred after 1964.

Prices of materials and services used by the food industry also increased in 1968. Intermediate goods used in food marketing, such as containers and packaging materials, office supplies, and fuel averaged 2.8 percent higher during the first 3 quarters of 1968 than during the same period in 1967. Services, which include such items as rent, property insurance and maintenance, and telephone, increased considerably more—6.3 percent. New plant and equipment costs averaged 3.6 percent higher in the first half of 1968 than during the same period of 1967.

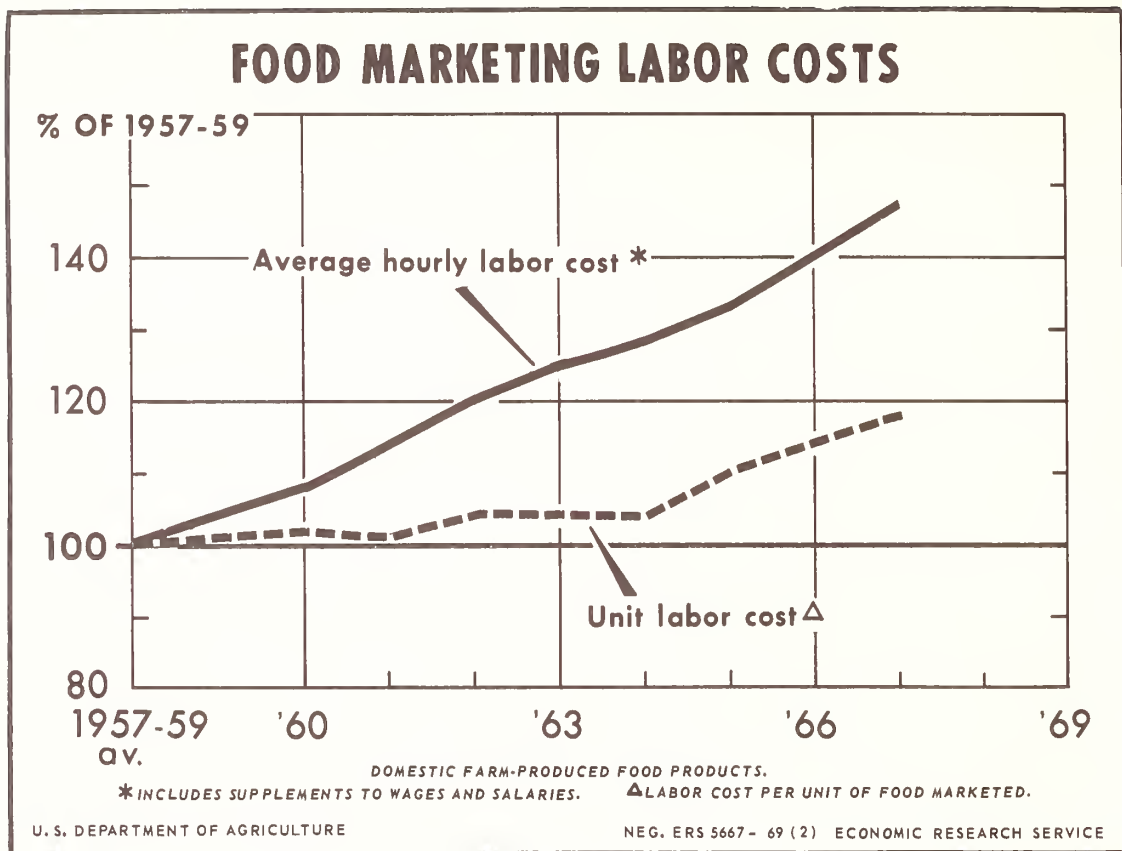


Figure 7

One of the sharpest cost increases to hit food firms in recent years has been the rising cost of borrowing money. Both short-term and long-term interest rates were markedly higher in 1968 than in 1967. As an example, bank rates on short-term business loans in 35 centers averaged 6.9 percent in August of 1968 compared with 6 percent a year earlier. Long-term rates also increased. Yields on high-grade corporate bonds averaged 6.1 percent in the third quarter of 1968 compared with 5.6 percent in the same quarter of 1967.

Following a period of stable railroad freight rates, costs of transporting agricultural products by rail went up in 1967 and 1968. On August 19, 1967, the Interstate Commerce Commission granted railroads a 3-percent general increase in rates. The railroads proposed another general increase in 1968 and were granted an interim increase in rates of 3 percent in June of 1968. Actual increases in rates, however, were not uniform in all regions of the country or for all commodities. Some rate reductions--notably rent-a-train--were put into effect during 1968.

Marketing firms earned about the same profit in 1968 as in 1967 (figure 8). Profits after taxes of 15 leading retail food chains averaged 1 percent of sales in the first 9 months of 1968. This was the same as a year earlier, when profits were lowest in the past 10 years. Possible reasons for the relatively

# PROFITS OF CORPORATIONS MARKETING FOOD PRODUCTS

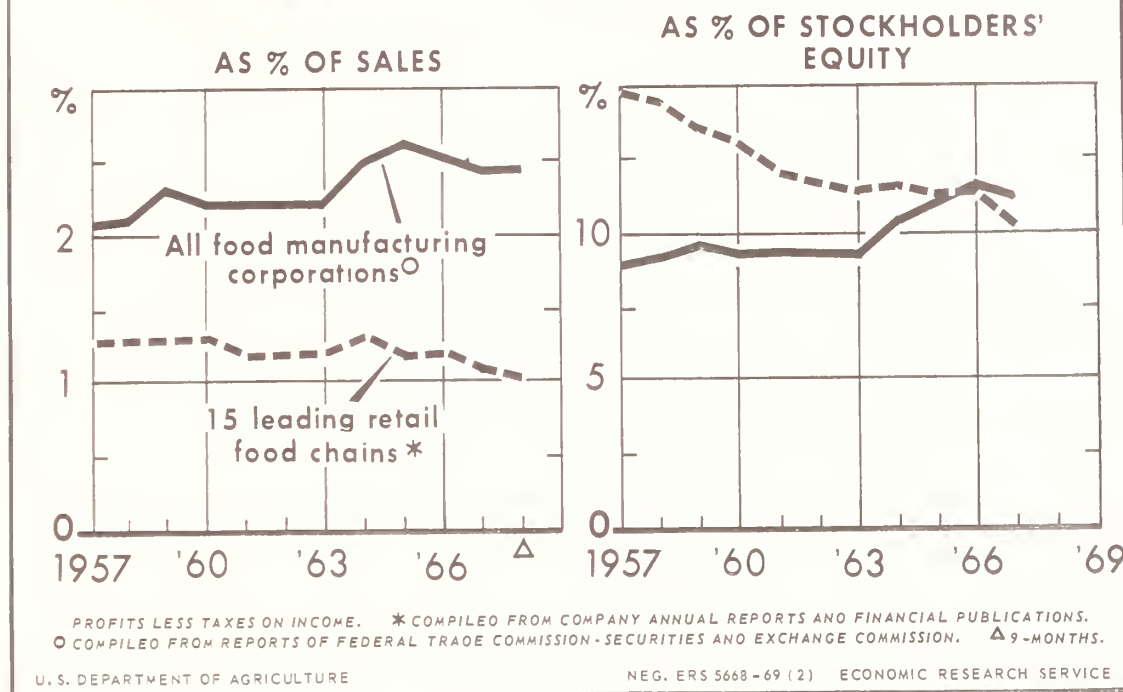


Figure 8

low level of profits are rising costs that have not been entirely reflected in higher retail prices, and intensified competition in the form of discounting and new store expansion.

Profits (after taxes) of corporations manufacturing food products averaged 2.4 percent of sales in the first 9 months of 1968, the same as a year earlier. Profits of food manufacturers have averaged significantly higher since 1964 than during the 1960-64 period.

## HIGHER PRICES AND COSTS LINKED TO GENERAL ECONOMIC EXPANSION

Developments in food prices and marketing costs must be viewed in the context of the overall economy. 1968 was the eighth year of the longest period of economic expansion in the history of the economy. The present prosperity has been outstanding in strength as well as in length. From 1960 to 1968, the total real output of goods and services increased 45 percent or close to 5 percent per year. Real per capita income (after taxes) rose 31 percent. Unemployment declined from 5.5 percent in 1960 to 3.6 percent in 1968, the lowest rate since 1953.

Prosperity has brought exceptional gains in production, jobs, and incomes, but has put considerable pressures on the price structure of the economy. Pressure on prices occurs when the rate of economic expansion strains available productive resources and rising income increases consumer demand. Since 1964, the Consumer Price Index of all goods and services rose an average of almost 3 percent per year, or more than double the rate in the early 1960's.

Although per capita consumption of food remains about the same from year to year, rising incomes and strong demand affect the kinds of food purchased. When incomes are going up, consumers are more willing to pay a higher price, if necessary, to get the foods they want. The impact of strong demand is compounded when food production and supplies are reduced. For example, reduced supplies of meat products in 1966 and fruits and vegetables in 1968, coupled with strong demand, resulted in significant increases in their retail costs.

### Trend in Food Costs

Consumers paid 14 percent more for farm foods in 1968 than a decade ago. Prices received by farmers went up 12 percent while marketing spreads rose 15 percent (figure 9).

Retail food costs have gone up almost every year from the base period of 1957-59. But the rate of gain and factors causing the increased differed considerably.

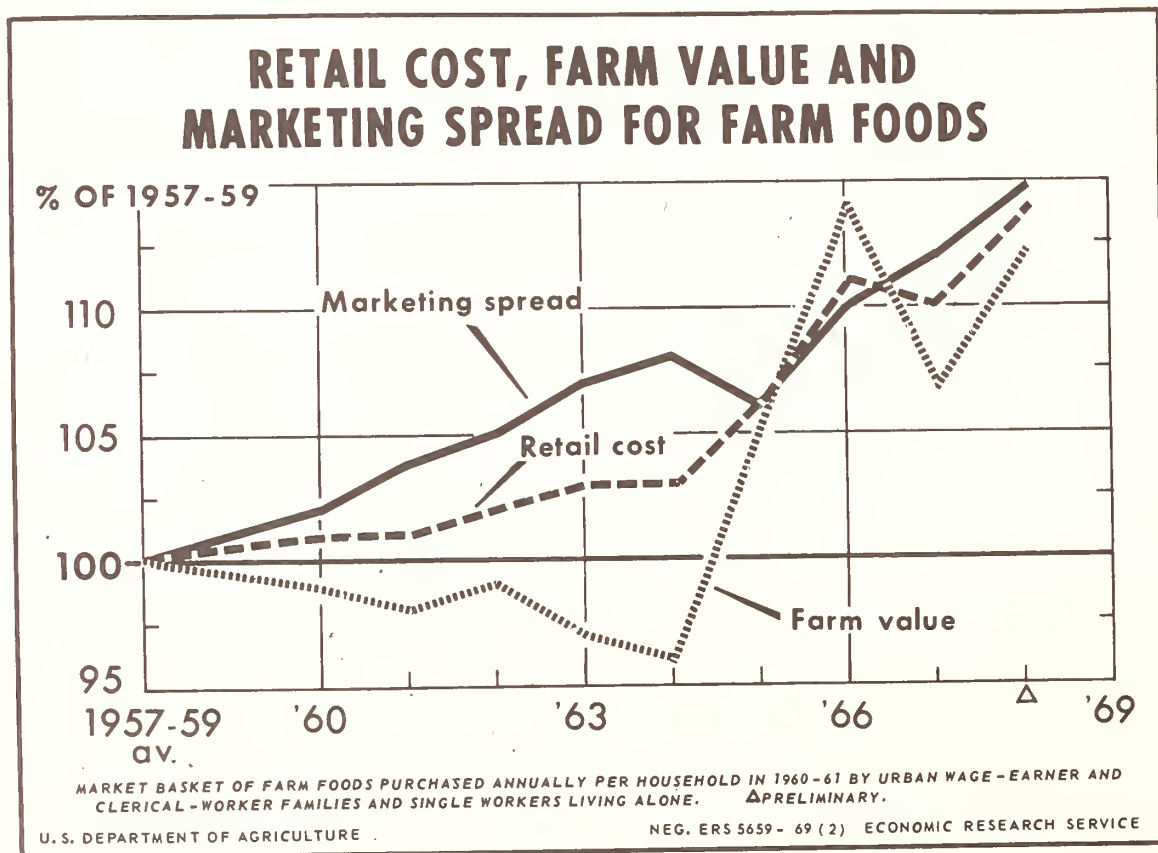


Figure 9



In the period 1960-64, the retail cost of the market basket rose an average of only 0.6 percent per year above the 1957-59 average. Returns to farmers for foods in the market basket declined almost every year and averaged lower in 1964 than in 1957-59. All of the increase in the retail cost of farm foods in the early 1960's was caused by rising marketing costs. This was similar to the trend of the post-World War II period.

Between 1964 and 1968, the retail cost of the market basket increased an average of 2.5 percent per year. Unlike the earlier period, higher farm prices for food products as well as higher marketing costs contributed to the rise. Each year since 1964, the farm value of foods in the market basket has been higher than at anytime between 1960 and 1964. In 1968, it was 16 percent higher than in 1964. In contrast, the marketing spread was 7 percent wider. The increase in farm value caused slightly over one-half of the increase in the retail cost of the market basket between 1964 and 1968.

Changes in Food Prices Compared with Other Consumer Prices

Prices of most nonfood items have increased more than food prices in the past decade (figure 10). Since the base period of 1957-59, the BLS index for all goods and services bought by consumers increased 21 percent, while the index for food bought in retail stores for home preparation rose 16 percent. The price index for food at home has been below the CPI every year since 1957-59. On the other hand, prices of restaurant meals have gone up 36 percent since 1957-59, or considerably more than the CPI. This rise partly reflects relatively large gains in hourly earnings of food service workers since 1964.

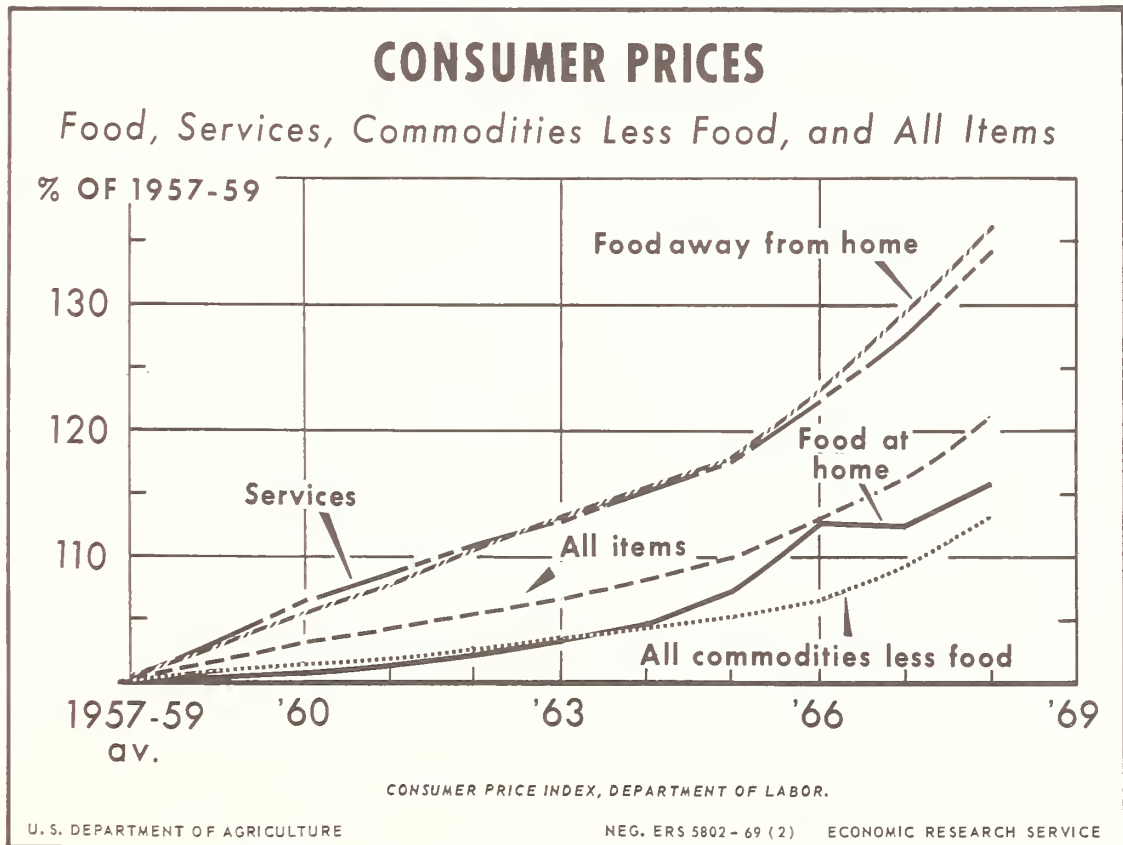


Figure 10

Retail food prices have gone up about half as much as prices of services (such as rent, mortgage, interest, automobile insurance, public transportation fares, and medical care services).

Increases in retail food prices most nearly resemble increases in prices of other nondurable commodities (such as apparel, footwear, household furnishings, and gasoline). Since 1957-59, prices of nondurable commodities--excluding food--have gone up 18 percent or slightly more than food at home.

#### Share of Income Spent for Food Continues to Decline

Although we have spent more money for food in most years, the share of our income spent for food has continued to fall. One of the reasons for this is that continued prosperity has increased disposable income (after-tax dollars) considerably more than food prices.

Consumers spent \$503 per person for food in 1968, or 32 percent more than 10 years ago (figure 11). This increase was about double the rise in food prices during this period. Food expenditures went up more than food prices because consumers shifted to more expensive foods, bought more services with food, and purchased more restaurant meals, etc.

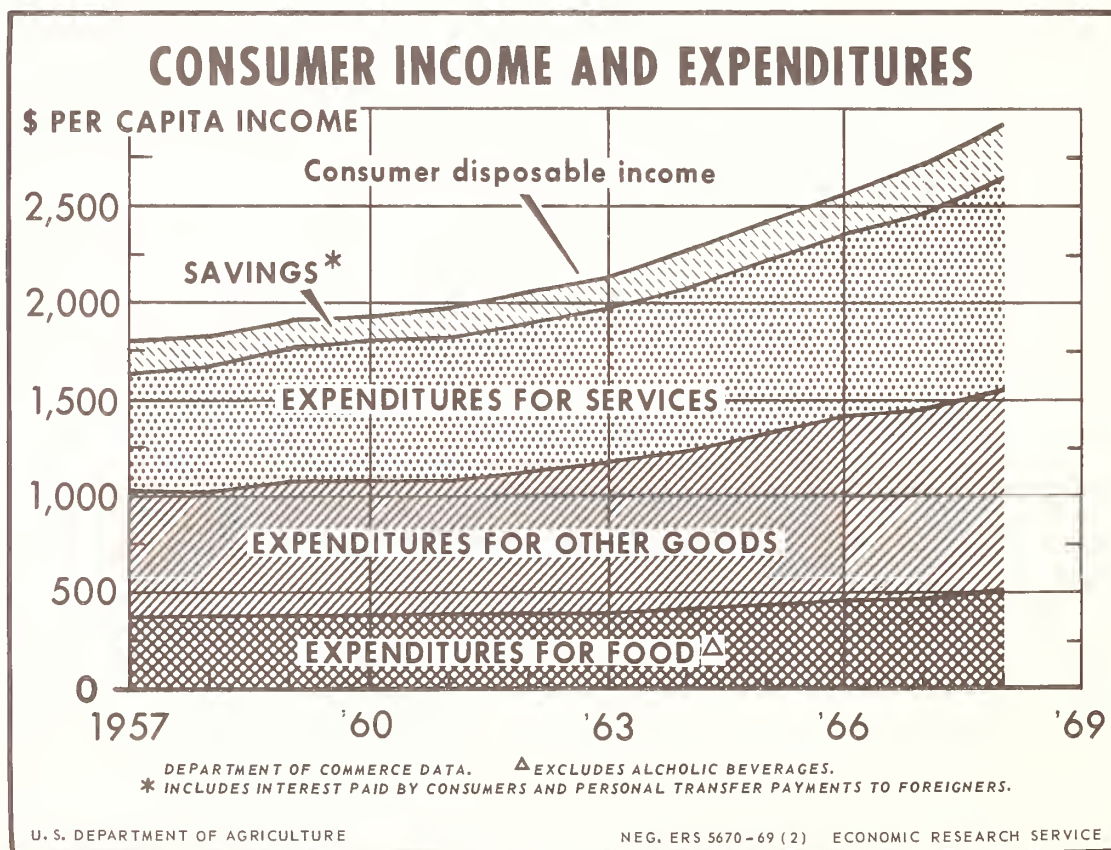


Figure 11

Income per person increased 60 percent between 1958 and 1968--nearly double the increase in food expenditures. Thus, the percentage of income spent for food declined from almost 21 percent to slightly over 17 percent in these 10 years. While on the average we are better off, it should be recognized that many families spend considerably more than the average, particularly the several million persons that are living in poverty. Even for these people, however, food is a better buy than many other goods and services. In many parts of the world, food claims a much larger proportion of income than in the United States. Food expenditures in Western Europe range from 25 to 40 percent of total consumer expenditures, and in Eastern Europe and Asia they are even higher.

Work time in the United States required to purchase fixed quantities of food declined as income rose. For example, the average wage earner had to work 30 minutes to buy a pound of round steak in 1958, compared with 23 minutes in 1968. The labor cost of a  $\frac{1}{2}$  gallon of milk dropped from 14 to 11 minutes, and of a dozen eggs from 17 to 11 minutes.

### LABOR PRODUCTIVITY IN FOOD MARKETING

Productivity is generally recognized as a key measure of economic efficiency or performance since the output of goods and services and their cost depend to a large degree on the quantity of inputs required in the production process. Increases in productivity are essential to keep prices from rising as much as the costs of inputs. The most commonly-used input factor in productivity analysis, in fact the only one in general use, is the man-hour unit of labor. However, since labor is the only input, overall productive efficiency is not measured. Increases in labor productivity may be caused by such things as greater capital investment, changes in the quality of inputs, economies of scale, and management practices.

#### Food Distribution

Food distribution includes the activities of food wholesalers, retailers, and eating places. Labor productivity--output per man-hour in food distribution increased 2.7 percent per year during 1948-63. Output increased substantially during the period, while the number of man-hours required declined slightly (figure 12). Preliminary data for 1964 and 1966 show further increases, but at a slower rate than for 1948 to 1963. Output per man-hour has increased at a much faster rate in food retailing and wholesaling than in eating places. Gains in productivity in food distribution have been about the same as in the total nonfarm sector of the economy.

Costs of labor per unit of output in food distribution have gone up more than labor productivity. Between 1948 and 1963, hourly labor costs increased 82 percent, while output per man-hour rose 48 percent, resulting in a 23-percent increase in unit labor costs. However, nonlabor costs (total distribution costs less labor costs) per unit rose even more, or about 97 percent. The faster increase in nonlabor costs reflects the substitution of capital for labor and increases in expenditures for such items as advertising, maintenance, rent, and interest. In 1963, nonlabor charges accounted for 51 percent of total distribution costs, compared with 39 percent in 1948.

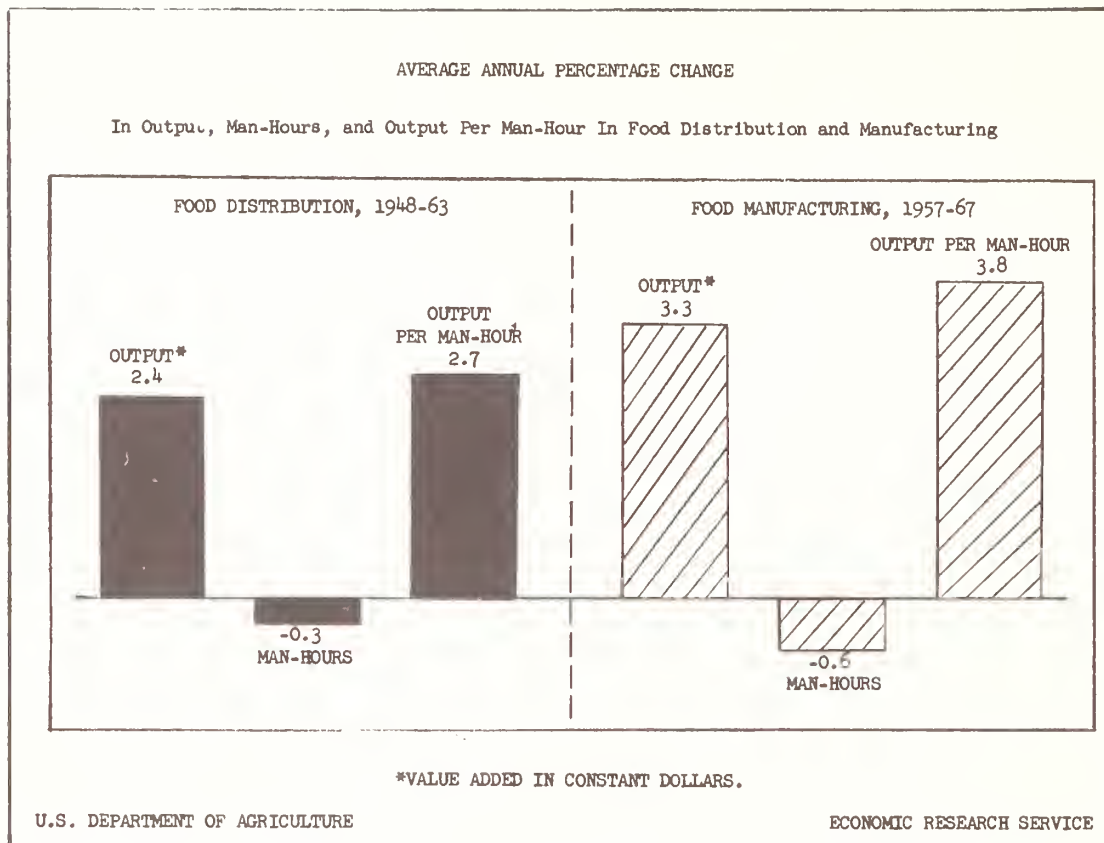


Figure 12

Changes in organization of establishments and growth in capital investment helped increase productivity in food distribution. Nearly all retail food stores are now self-service, compared with only three-fifths in 1948. In effect, there has been a substitution of customer labor for paid labor. This was accompanied by a decrease in output of services per unit of food handled. Part of the decrease in personal services was offset by new services such as parking lots, larger stores, and wider selection of products.

Although data are lacking, greater capital investment has boosted labor productivity. Palletized storage, conveyors, and mechanical trucks have reduced labor requirements in warehouses. Smaller stores are being replaced by larger stores to take advantage of economies of scale.

Greater labor productivity in food distribution will depend mainly on labor saving equipment. New methods of packaging meat and produce, and new checkout systems may lead to improved output per man-hour. Further increases in productivity due to elimination of small, relatively inefficient stores are likely to be small.

## Food Manufacturing

Labor productivity in factories processing farm-originated foods increased an average of 3.8 percent annually during 1957-67, compared with 2.7 percent the previous decade. The gain in output per man-hour was slightly faster than the rise in production. Thus, the number of man-hours or labor required in food manufacturing declined slightly during the period (figure 12).

Productivity of all food processing industries gained during 1957-67. The dairy industry had the largest average increase (4.8 percent). Productivity in the dairy products, meat products, and grain mill products industry rose an average of 4.5 percent to 5.0 percent per year. Smaller gains of around 3.5 to 4.0 percent were registered in other industries.

During 1957-67, most industries had larger rates of increase in output per man-hour than during the previous decade. The rates of increase in the grain mill and bakery industries during 1957-67 were almost triple their gains a decade earlier. Similarly, the confectionery industry almost doubled its rate of growth in labor productivity. Smaller, but significant gains also occurred in the meat and dairy manufacturing industries.

Several factors have contributed to the rise in labor productivity. Many technological innovations have been adopted (such as continuous processes, automation, and conveyerization). The adoption of new technologies has resulted in a substitution of capital for labor and involved an increase in expenditures for plant and equipment. Expenditures for new plant and equipment by all firms manufacturing food and beverages averaged \$1.4 billion during 1965-67, up about 80 percent from 1954-56. Expenditures for research have also gone up markedly. In 1966, the food industry spent \$166 million for research and development, or 2½ times as much as in 1956.

Productivity in food manufacturing increased faster than in all manufacturing industries and the entire private sector of the economy.

### DEVELOPMENTS IN PRICES AND SPREADS FOR SELECTED COMMODITIES

#### Fresh Fruits

Prices of fresh fruits averaged much higher in 1968 than in the preceding year. The retail cost of fresh fruits in the market basket averaged 18 percent higher in 1968 than in 1967. The farm value was up 30 percent, and the farm-retail spread widened 13 percent.

The big increase in the farm value of fruits was caused primarily by a sharp decline in production of oranges and apples. The 1967-68 crop of oranges was around one-third less than the previous crop. As a result, the U.S. average price of oranges at the packing house door was \$3.07 per box for the 1967-68 season, compared with \$1.85 a year earlier. Prices of apples rose sharply in the first half of 1968, due to below-normal production of apples in 1967. The 1967 apple crop was about 8 percent below the 1962-66 average.

Reduced production led to higher prices of oranges and apples from most production areas. For example, the retail price of Florida oranges in New York during the 1967-68 season averaged almost 20 percent higher than the previous year. Florida orange growers and packers received practically all of the increase (figure 13).

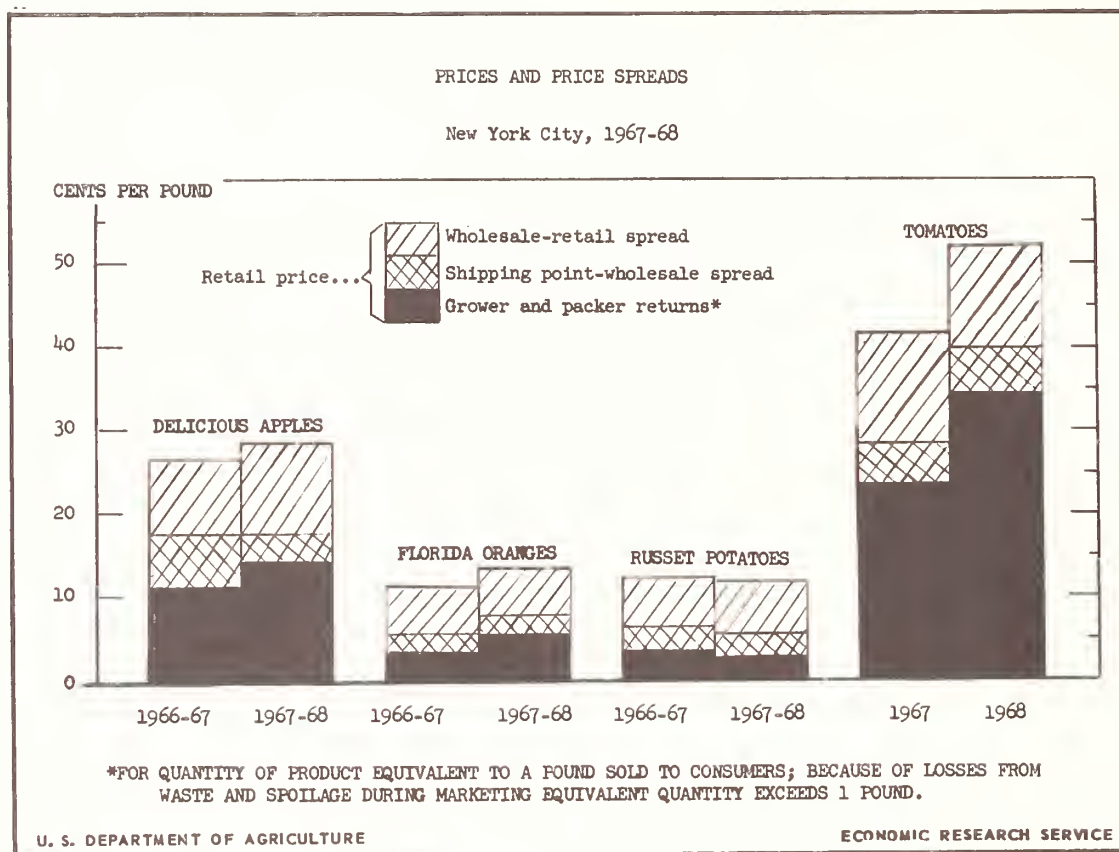


Figure 13

Marketing charges for Florida oranges sold in New York City (as measured by the spread between the return to the grower and packer and the retail price), amounted to 7.8 cents per pound in both the 1968 and 1967 seasons.

Retail prices of Washington Red Delicious fancy apples averaged 28.3 cents per pound in New York City during the 1967-68 marketing season--about 2 cents per pound above the preceding year. Returns to the grower and packer increased 3 cents per pound, or 28 percent, reflecting a decline of around one-fifth in supplies of Washington apples for the 1967-68 season. Since the return to the grower and packer increased more than the retail price, the spread declined.

## Fresh Vegetables

The retail cost of fresh vegetables in the market basket averaged about 6 percent higher in 1968 than in 1967, primarily because of relatively high prices during the first half of the year. Farmers received record higher prices for fresh vegetables the first part of the year because of a decline in the winter and spring vegetable crops. Winter tonnage of fresh vegetables was 6 percent smaller in 1968 than in 1967, and spring output was down 4 percent. The farm-retail spread also widened in 1968, continuing the steady upward trend of the past decade.

Prices of tomatoes increased substantially more in 1968 than prices of other major fresh vegetables (such as potatoes). For example, the retail price of Florida tomatoes in New York City during the first part of 1968 averaged 24 percent higher than in the same period a year earlier. Tomato growers and packers received practically all of the increase in the retail cost of tomatoes. As a result, the farm-retail spread was about the same in 1968 as in 1967 (figure 13).

While tomato prices increased sharply in 1968, the retail price of Idaho russet potatoes marketed in New York declined slightly. All of the decrease in the retail price resulted from lower farm prices caused by record large supplies. The wholesale-to-retail spread, which accounts for around half of the retail price of Idaho potatoes, widened 9 percent in 1968.

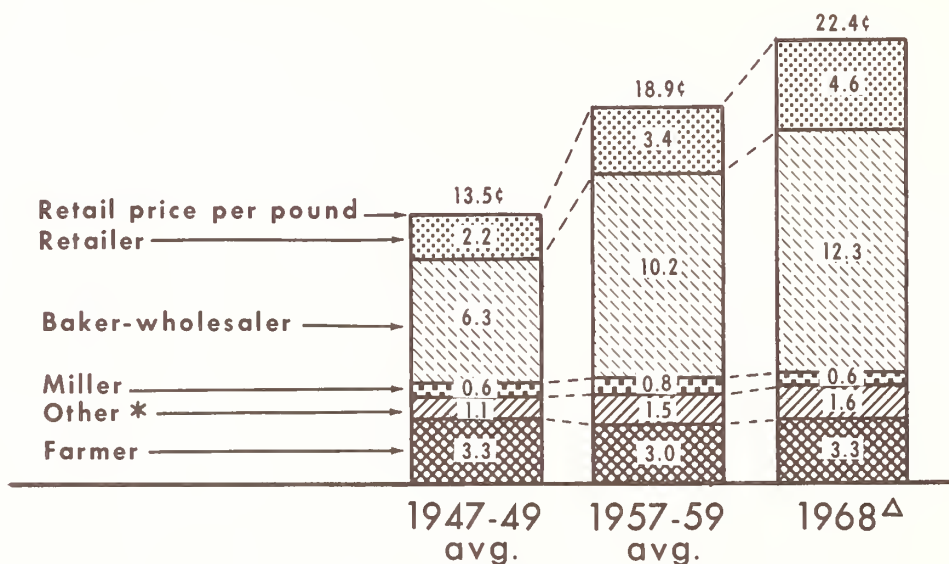
## Bread

Returns to farmers for the ingredients in a 1-pound loaf of white bread declined 0.1 cent in 1968. This kept the retail price from going up as much as the spread, which rose 0.3 cent. The decline in farm value reflected, in part, the record 1968 wheat crop and an increased carryover. The retail price of a 1-pound loaf of white bread increased 0.2 cent in 1968 to an average of 22.4 cents. Practically all of the increase in retail bread prices the past 2 decades has gone into the farm-retail spread.

The retail price and farm-retail spread have risen nearly every year since World War II (figure 14). The retail price rose at an annual rate of 3.4 percent between 1947-49 and 1957-59, but the rate of increase has slowed to 1.7 percent a year since 1957-59. Similarly, the rate of increase in the spread slowed from 4.5 percent per year during the 1950's to 1.9 percent in the 1960's.

The baker-wholesale spread, the largest component of the total farm-retail spread, doubled in the past 2 decades and caused over two-thirds of the increase in the retail price. An inefficient distribution system and rising costs have caused most of the increase in the baker-wholesale spread. Some offsetting gains in efficiency through automation and improved production methods, however, have slowed down the rate of increase in the baker-wholesale spread since 1957-59.

## CONSUMER'S BREAD PRICE



\* SHORTAGE AND NONFARM INGREDIENT COST. 1968 PRELIMINARY. Δ INCLUDES VALUE OF WHEAT MARKETING CERTIFICATE.

U. S. DEPARTMENT OF AGRICULTURE

NEG. ERS 4210-69 (2) ECONOMIC RESEARCH SERVICE

Figure 14

Increases in the retailer's spread have accounted for about a fourth of the increase in retail bread prices since 1947-49. However, the retailer's spread has also increased at a slower rate in the 1960's than in the 1950's.

The miller's spread has changed very little. Part of the reason for this stability has been attrition of small inefficient mills and the adoption of automation and bulk handling of flour by remaining firms.

Other components of the farm-retail spread, including transportation and nonfarm ingredients costs, have increased over 50 percent since World War II. The cost of these services rose at about the same rate as the retail price.

### Chickens and Eggs

The farm price for Grade A large eggs sold in 12 major cities averaged 31.7 cents per dozen in 1968, compared with a sharply depressed price of 27.7 cents in 1967 and a record high of 37.3 cents in 1966 (figure 15). The substantial price decline in 1967 was caused by increased production following the high prices of 1966. Producers reacted to the record low prices of 1967 by cutting back production. This was reflected in higher prices by mid-1968.



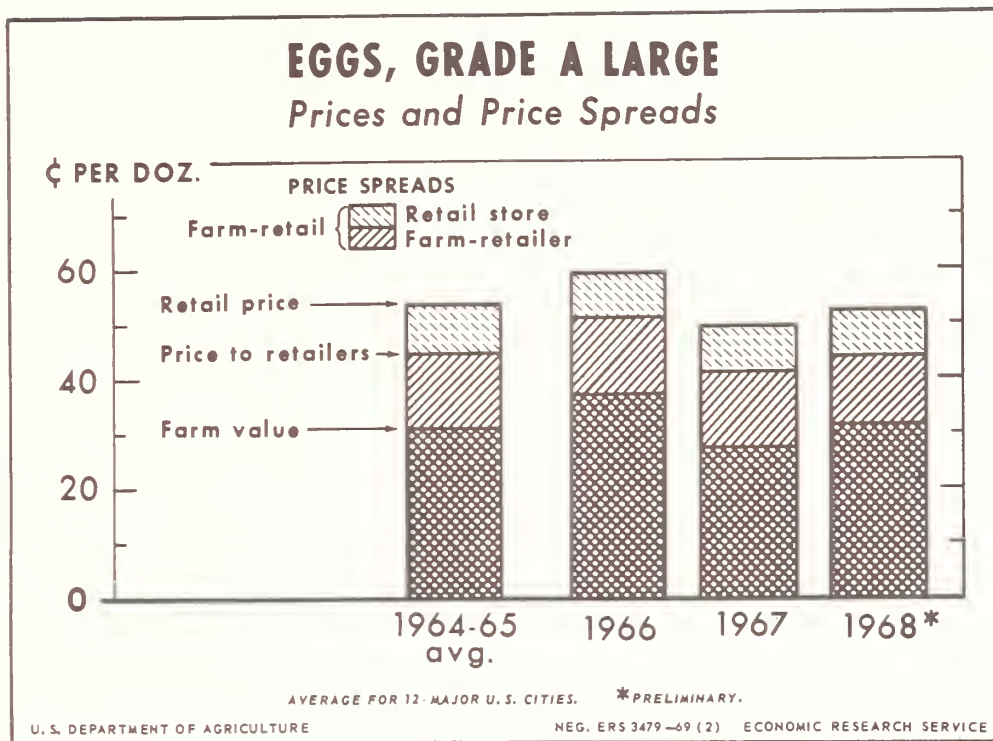


Figure 15

The farm-retail spread for eggs remained relatively stable while sharp changes were occurring in farm prices. The spread in the 12 major cities averaged 20.7 cents per dozen in 1968, compared with 21.9 cents in 1967 and 22.2 cents in 1966. Because of the tendency to remain stable over time, marketing charges (farm-retail spreads) make up a larger share of the retail price of eggs in periods of low prices than in periods of relatively high prices.

Retail prices of eggs in the 12 major cities averaged 52.4 cents per dozen in 1968, about 3 cents more than in 1967 but 7 cents below 1966.

Prices of frying chickens marketed in 12 major cities increased at all market levels from 1967 to 1968 (figure 16). The retail price averaged 41.1 cents per pound compared with 39.4 cents in 1967. Prices of frying chickens in 1968 reflected unusually strong demand for meats as broiler production was nearly the same as in 1967. The farm value of frying chickens marketed in 12 cities averaged 19.4 cents per pound, about 1 cent more than in 1967.

The farm-retail price spread for frying chickens in 12 cities increased less than 1 cent to 21.7 cents per pound in 1968. Since the farm value increased more than the spread, the farmer's share of the retail price rose slightly.

# FRYING CHICKENS

## Prices and Price Spreads

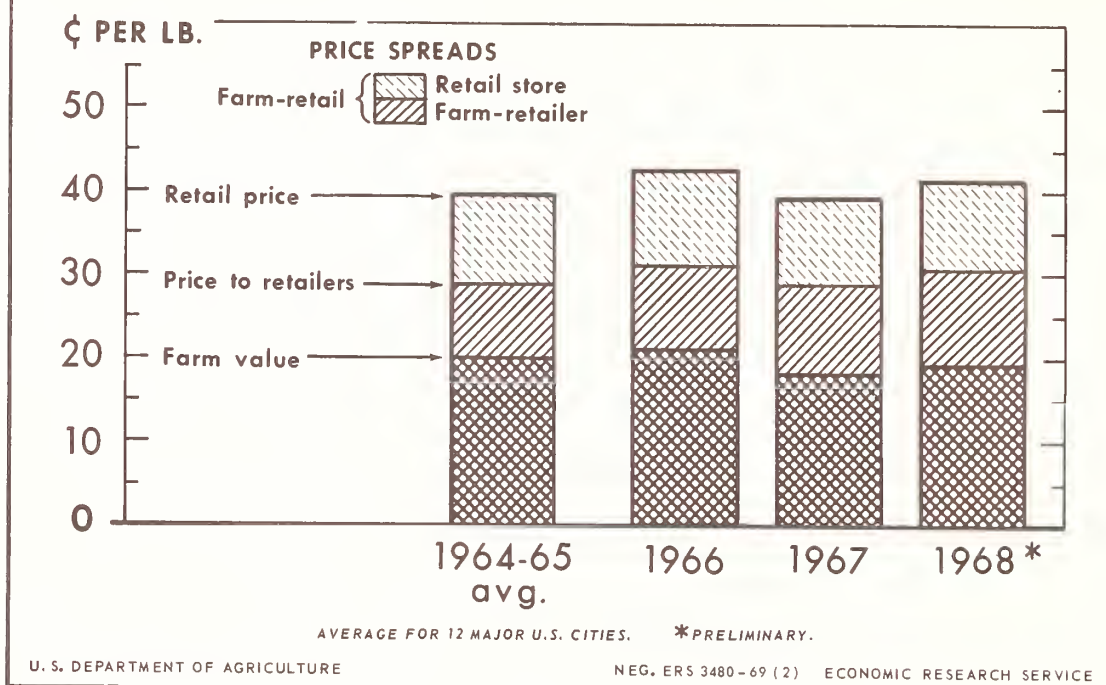


Figure 16

### Oilseeds

Salad dressings are an important market outlet for cottonseed and soybean oils. During 1966, about 12 percent of the domestic production of soybean oil, 10 percent of cottonseed oil, and 2 percent of corn oil were used for salad dressings. Soybean oil was the principal oil used in their manufacture, accounting for 80 percent of the total oils utilized. Cottonseed oil accounted for 19 percent, with corn and other oils (including safflower) making up only 1 percent.

Consumption of cooked salad dressing, one of the major kinds of dressings, in 1966 was 2.8 pints per person, equivalent to roughly 1 pound of crude vegetable oil.

Retail prices of cooked salad dressing in 1966 differed considerably among brands and types of retail outlets usually averaging lower in retail food chains and large independent supermarket than in small independent retail food stores. Prices were as much as 17 percent lower in chain retail stores than in small retail stores for major brands and as much as 12 percent lower for minor brands.

About 30 percent of the retail price of cooked salad dressing is associated with manufacturing charges, and almost 60 percent represents wholesaling and retailing charges (figure 17). The farmer received about 7 percent of the retail price for the crude oils used in making a pint of cooked salad dressing, slightly less than in 1956.

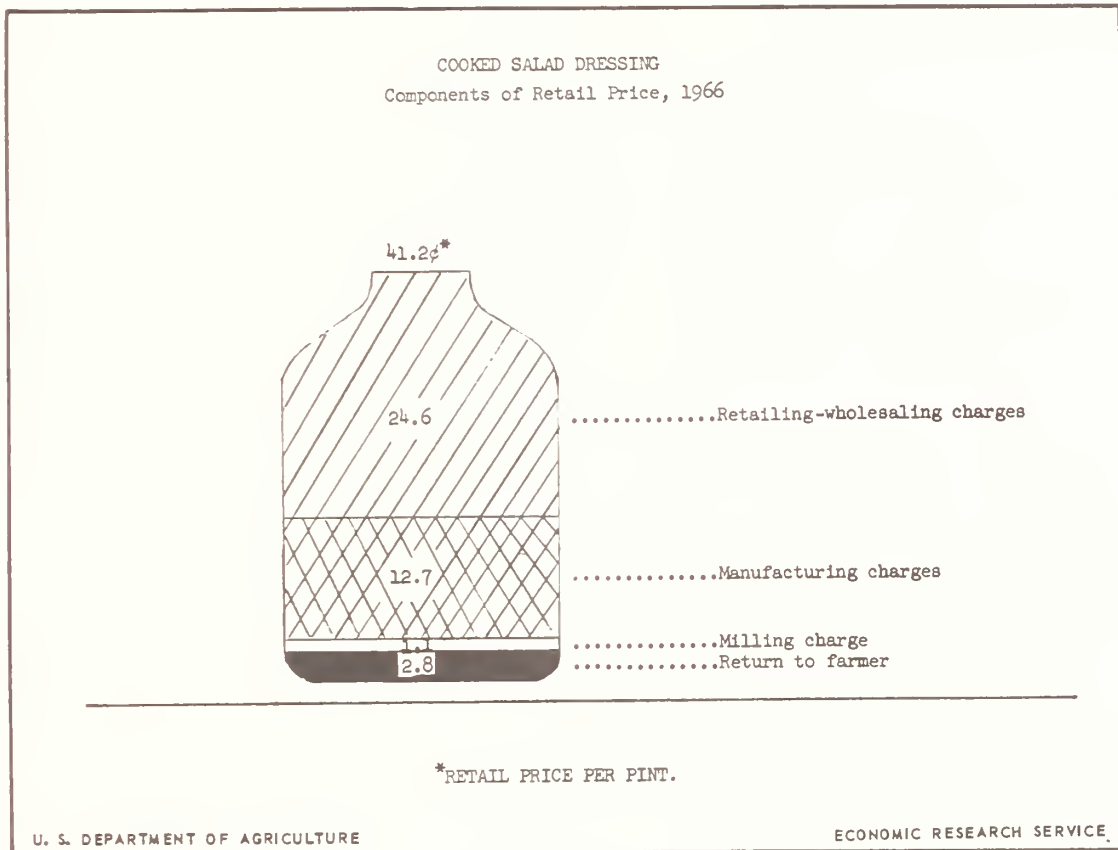


Figure 17

Charges for manufacturing salad dressing have decreased slightly since the mid-1950's. In 1956, the manufacturer's share was about 15 cents. By 1966, it was less than 13 cents.

In 1956, the difference between the manufacturer's selling price and the average retail price per pint of cooked salad dressing was about 17 cents. However, it has been widening in recent years, reaching nearly 25 cents in 1966.

#### RESEARCH TO IMPROVE MEASUREMENTS OF PRICES AND MARKETING SPREADS

During the past year, considerable progress was made on an evaluation of the methods of calculating marketing spreads for selected farm foods. The main objective of this work is to revise the methods used, if necessary, to give greater emphasis to price specials in computing U.S. average prices and marketing spreads. This work was initiated in response to the allegation of the National Commission on Food Marketing that retail prices and spreads are overstated--especially for beef, pork, and poultry--because these items are frequently sold at special prices.

Two surveys were initiated. Because BLS retail prices are now used to compute marketing spreads, a survey was made to determine if BLS prices adequately represent weekend price specials. Another survey of meat prices was made in selected chain stores in 5 cities to obtain both regular and special prices and data on sales volume. The main objective of this survey was to find the effect of special prices on the average price (regular and special prices combined) when prices are weighted by sales volume.

Results of 5-city study--Special prices affect the average per pound price of all cuts of beef and pork in 2 separate but related ways. The first, called the price effect, is the decrease in the average price, due to the lower prices at which some items are sold on special. This occurs when items are on special, regardless of whether there is a change in the volume sold. In practice, however, the volume of an item sold increases when it is on special. This second influence, called the volume effect, further lowers the average price because the special prices are given greater weight in computing the average price.

Increases in the volume sold due to price specials varies from store to store, week to week, and cut to cut. For example, 1 firm sold 19 times more ham during weeks when ham was on special. Similarly, another firm sold 14.5 times more full-cut round steak when it was special. These however, are exceptions. Sales of most items increased 2 to 5 times when sold at special prices.

The results of the study showed that about three-fifths of the total effect of specials on the average price was contributed by the price effect and two-fifths by the volume effect.

Results of BLS survey--U.S. average prices published by BLS are currently used in computing marketing spreads. Because of the methods used by BLS in collecting price data and computing averages, questions have been raised as to whether weekend prices are adequately reflected in U.S. average prices.

The survey showed that weekend prices were generally lower than first-of-week prices, because price specials were more frequent on weekends. However, the difference in U.S. average prices usually was less than 1 percent. Part of the reason for the small difference was that stores frequently offered price specials during the early part of the week as well as on weekends. Another reason is that special prices are offered by a small proportion of stores at any given time. Thus, U.S. average prices for beef and pork cuts published by BLS would not be appreciably decreased by including more weekend prices, and therefore, more price specials, in computing averages.

The information collected from these surveys indicates that some adjustments may be needed to more directly account for the volume effect of special prices on the U.S. average retail prices used to compute marketing spreads. However, the present methods of computing average retail prices for beef and pork appear to account for the price effect of specials and most of the volume effect.

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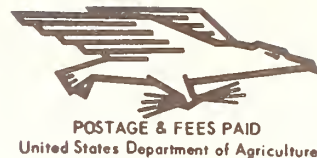
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